

Claims:

1. Process for packaging goods on a vertical packaging machine into a film, whereas a film tube (1) is formed and a cross seal is applied to the lower end of a film tube (1) to form the bottom (2) of a packaging item (3), characterized in, that film tube (1) above the sealing means is lowered while the film tube (1) is at least partially fixed by sealing means (9) and/or fixing means (12), to an extent that at least the bottom of the packaging item expands.
2. Process according to claim 1, characterized in that one portion is filled into tube, while the tube is fixed.
3. Process according to claim 2, characterized in, that the fill in of the portion expands the bottom of the packaging item.
4. Process according to the preamble of claim 1, characterized in, that during the packaging process at least parts of one portion (4) to be packaged are collected in the film tube (1) and/or in a fill pipe (10) and then dropped downwards and that the impact of the falling portion is used to compress the portion (4).
5. Process, preferably according to one of the preceeding claims, for packaging goods on a vertical packaging machine in a film, comprising the following steps:
 - a. cross-sealing of the lower end of a film tube (1) to form the bottom (2) of a packaging item (3),
 - b. filling one portion (4) of the goods into the film tube (1),
 - c. fixing the lower end (5) of the film tube and/or the portion (4) in its vertical position (6)
 - d. releasing the fixed portion (4) and the film tube (1),
 - e. vertically transporting the film tube (1) and/or dropping the film tube (1),
 - f. dropping the portion (4)

- g. stopping the transportation of the film tube (1),
- h. cross sealing the upper end (8) of the film tube to form the top of the packaging item (3) and
- i. separating the packaging item from the film tube,

whereas the sequence of the steps is not fixed, at least one step is executed twice and /or the steps can be carried out simultaneously.

- 6. Process according to claim 5, characterized in, that steps e. and f . and/or steps a. and c. are carried out essentially simultaneously and/or that step e is carried out twice.
- 7. Process according to claim 5, characterized in, that it comprises steps a – c, e, d – i, preferably in this sequence.
- 8. Process according to anyone of the claims 5 – 7, characterized in, that between steps c. and d. the film tube is transported vertically, to an extent that at least the bottom of the packaging item expands.
- 9. Process according to anyone of claims 5 - 8, characterized in, that step e. is carried out prior to step d so that wrinkles (11) are formed in the film tube (1).
- 10. Process according to anyone of claims 5 – 9 , characterized in, that between steps b. and c., the film tube and the portion (4) are lowered by a small extent.
- 11. Process according to anyone of claims 5 – 10, characterized in, that step c is accomplished by cross sealing means (9).
- 12. Process according to anyone of claims 5 – 11, characterized in, that step c is accomplished by fixing means (12).
- 13. Process according to anyone of the preceding claims, characterized in, that the film tube (1) is made from a flat film web with a longitudinal seal.

14. Process according to anyone of the preceding claims, characterized in, that two packaging items are produced simultaneously.
15. Process according to anyone of the preceding claims, characterized in, that the goods have a low and/or changing packaging density.
16. Process according to anyone of the preceding claims, characterized in, that the packaging goods is salad.